

**ARIZONA GAME AND FISH DEPARTMENT
HERITAGE DATA MANAGEMENT SYSTEM**

Animal Abstract

Element Code: AMAFF03020

Data Sensitivity: No

CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE

NAME: *Peromyscus merriami*

COMMON NAME: Mesquite Mouse, Merriam's Mouse.

SYNONYMS:

FAMILY: Muridae

AUTHOR, PLACE OF PUBLICATION: Mearns, 1896, Preliminary Diagnoses of New Mammals from the Mexican Border of the United States, p. 2. (Reprint: Proc. U. S. Nat. Mus., 19:138, 1896).

TYPE LOCALITY: Sonoyta, on Sonoyta River, Sonora, Mexico.

TYPE SPECIMEN: USNM 59234, adult female, skin and skull, collected by E. A. Mearns and F. X. Holzner, 1894. Original number 2815.

TAXONOMIC UNIQUENESS: One of 58 species in the genus *Peromyscus* found in North America. One of 8-9 in Arizona. Two subspecies in species *P. merriami*; *P. m. merriami* only subspecies found in State (not endemic).

DESCRIPTION: Upperparts ocher-buff overlaid with dusky, producing dull gray overall appearance. Underparts whitish with buff or tawny wash. Tail bicolored, dusky above, whitish below; more than half total length of animal. Head and body 3.8-4 inches (97-102 mm); tail 4-4.8 inches (102-122 mm); hindfoot 0.75-0.875 inches (20-24 mm).

AIDS TO IDENTIFICATION: Slightly larger than the Cactus Mouse (*P. eremicus*), otherwise difficult to distinguish in the field. Most other deer mice are much browner overall with a distinctly bicolored, well-haired tail. Habitat use may also be used to distinguish *P. merriami* from *P. eremicus*: *P. merriami* found in riparian or desert floor habitats consisting of dense thickets or brush including mesquite bosque, while *P. eremicus* usually found in rocky habitats, especially on hillsides.

ILLUSTRATIONS:

TOTAL RANGE: South-central Arizona south through Sonora to central Sinaloa, Mexico.

RANGE WITHIN ARIZONA: Pima, Pinal and Santa Cruz Counties.

SPECIES BIOLOGY AND POPULATION TRENDS

BIOLOGY: Nocturnal. Active throughout the year.

REPRODUCTION: May breed throughout the year, having a gestation period of approximately 21 days, and an average litter size of 2.2-2.8 young. Whitaker, Jr. (1996) states 2-4 young per litter.

FOOD HABITS: Granivore, herbivore, invertivore. Probably similar to *P. eremicus*, which feeds on fruit, flowers, and seeds of shrubs, insects and some green vegetation (NatureServe 2001).

HABITAT: Riparian or low desert habitats. Found in dense brush, mesquite bosque.

ELEVATION: 1,600 - 3,850? ft (488 - 1174 m?)

PLANT COMMUNITY: At Wilmot Station southeast of Tucson, they were taken in thick stands of mesquite, cholla, prickly pear, palo verde, and grasses (BISON 2000).

POPULATION TRENDS: Unknown.

SPECIES PROTECTION AND CONSERVATION

ENDANGERED SPECIES ACT STATUS: None

STATE STATUS: None

OTHER STATUS: None

MANAGEMENT FACTORS: This species should be of concern when channelization or other alteration/destruction is planned along both permanent and intermittent riparian areas, including adjacent desert scrub. The loss of mesquite stands due to cutting for firewood, and grazing by livestock is a concern in the continued existence of proper habitat for *P. merriami* (BISON 2000).

PROTECTIVE MEASURES TAKEN:

SUGGESTED PROJECTS: Population and life history studies are needed to better understand this species, along with studies of the effects of land management practices on current populations.

LAND MANAGEMENT/OWNERSHIP:

SOURCES OF FURTHER INFORMATION

REFERENCES:

- Biota Information System of New Mexico. 2000. BISON Species Account 050477: Merriam's Mouse (*Peromyscus merriami*). New Mexico Game & Fish, http://www.fw.vt.edu/fishex/nmex_main/species/050477.htm. pp. 1-7.
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- Hall, E. R. 1981. The Mammals of North America. Volume II, Second Edition. John Wiley & Sons, New York. pp. 661-662.
- NatureServe. 2001. Comprehensive Report Series - *Peromyscus merriami* (Mesquite Mouse). <http://www.natureserve.tnc.org>. pp. 1-5.
- Poole, A. J., and V. S. Schantz. 1942. Catalog of the type specimens of mammals in the United States National Museum, including the Biological Surveys Collection. United States Government Printing Office, Washington. Smithsonian Institution, U. S. Nat. Mus. Bull. 178. p. 328.
- Whitaker, Jr., J. O. 1996. National Audubon Society Field Guide to North American Mammals. Revised Edition. Alfred A. Knopf, New York. pp. 594-595.

MAJOR KNOWLEDGEABLE INDIVIDUALS:

ADDITIONAL INFORMATION:

May occur sympatrically with *P. eremicus*.

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